

401 Ninth Street, NW North Lobby, Suite 500 Washington, DC 20004 Tel: 202 482-7200 Fax: 202 482-7272 www.ncpc.gov

# NATIONAL ARBORETUM MASTER PLAN MODIFICATION and CONCEPT DESIGN FOR A CLASSICAL CHINESE GARDEN

# 3501 NEW YORK AVENUE, NE

#### WASHINGTON, D.C.

#### Finding of No Significant Impact

DEC 2.9 2006

Pursuant to Section 10 of the Commission's Environmental Policies and Procedures, I have evaluated the U.S. National Arboretum Master Plan Modification, as shown on NCPC Map File No. 43.20(05.00)-42157. I find that the mitigation specified and noted in the paragraphs below, and that has been incorporated in the Master Plan Modification submitted to the Commission, is adequate to establish that if the mitigation is implemented, the plan would not significantly affect the human environment. The minor impacts to cultural components of the environment regarding the modification may affect one archeological site, and are being addressed by a National Historic Preservation Act, Section 106 requirement process, which will be completed by the Arboretum in the further development of the project planning and will be provided to NCPC and the District of Columbia State Historic Preservation Officer (DC-SHPO). Outcome from the DC-SHPO review and any conditions will ensure that the plan and its implementing actions will not significantly affect the human environment.

Consequently, after review of the environmental assessment, I have determined pursuant to Section 102(2)(C) of the National Environmental Policy Act, the Council on Environmental Quality Regulations (40 CFR, Parts 1500-1508), and NCPC's Environmental and Historic Preservation Policies and Procedures that the U.S. National

Arboretum Master Plan Modification and concept site development, if implemented with the specified mitigation, would not significantly affect the quality of the human environment.

Patricia E. Gallagher, AICP

**Executive Director** 

# **Background**

The United States National Arboretum (Arboretum) proposes to revise and update the master plan for the National Arboretum at 3501 New York Avenue, NE in Washington, DC. In December of 2006 the Arboretum provided a submission of review materials for master plan approval from the National Capital Planning Commission.

In compliance with NCPC's Environmental and Historic Preservation Policies and Procedures (April 1, 2004), the National Arboretum, as the lead federal agency within the U.S. Department of Agriculture, prepared an Environmental Assessment (EA) of the master plan modification and its detailed proposed project elements that comprise the site development revisions and new construction proposed for the National Arboretum.

The NCPC is announcing on its website the availability of the EA for public comment. The EA and comments from other federal and District of Columbia agencies about the EA analysis, appended to the document, are information that is made available for review in compliance with the requirements of the National Environmental Policy Act (NEPA) and the Commission's implementing Environmental and Historic Preservation Policies. In addition, the notice adheres to procedures that apply to actions that affect floodplain areas in accordance with Federal Executive Order (EO) 11988, "Floodplain Management," dated May 24, 1977 and the NCPC implementing procedures for the Executive Order.

Standard for evaluation. Under NEPA, CEQ regulations, and NCPC Environmental and Historic Preservation Policies and Procedures, an EA is sufficient and an Environmental Impact Statement need not be prepared if the EA supports a finding that the federal action will not significantly affect the human environment. The regulations of the Council on Environmental Quality define "significantly" as used in NEPA as requiring consideration of both context and intensity of impacts. 40 CFR §1508.27. Context means that the significance of the action must be analyzed in several contexts such as society as a whole, the affected region, the affected interests and the locality. Intensity takes into account a number of factors specified in the regulation.

NCPC's requirements for a Finding of No Significant Impact (FONSI) are set forth in the Environmental and Historic Preservation Policies and Procedures (April 1, 2004) at Section 10(E). They provide that the FONSI must specify: "Any commitments to mitigation that are essential to render the impacts of the proposed action not significant, beyond those mitigations that are integral elements of the proposed action."

Public Comment The National Capital Planning Commission, as a federal agency adopting the prepared EA dated December 2006, requests public comments on the EA Finding from December 29, 2006 to January 31, 2007. The EA availability was announced on the NCPC website starting December 29, 2006. As an action requirement of the Commission's environmental procedures, the adoption of an EA and Finding of No Significant Impact by the Commission staff is to be announced to the general public, and allow a period of public review of the FONSI, if the proposed action would be located in a floodplain, E.O. 11988, Sec. 2(a)(4). The Commission will post the Finding of No Significant Impact on the Commission website at www.ncpc.gov. The notice will specify a posted copy of the EA also. Additionally, the Commission Tentative Agenda for the Commission's February 1, 2007 will contain a notice regarding review of the proposed master plan modification. The Tentative Agenda is distributed to over 750 recipients.

# The proposed action

The proposed action by the Arboretum is the implementation of master plan revisions, or modifications, that include the following main objectives:

- Construction of a Chinese Garden complex, including a new tram stop, and small parking area consisting of 5,800 square feet (holding 24 vehicles). The parking will have an entrance and exit point along Holly Spring Road. The garden also includes 23 small open air and enclosed building structures or pavilions, the largest comprising approximately 6,800 square feet of space.
- Development of an Anacostia waterfront access path
- Construction of new American with Disabilities Act (ADA) accessible pedestrian trails at the Asian Collection and Anacostia waterfront area.
- Development of new tram stops at the Asian Collection, the waterfront access path, and the visitor center.
- Realignment of Holly Spring and Hickey Hill Roads
- Construction of Decorative Security Entrances to the Arboretum from the Anacostia River

Arboretum officials propose to improve access along the Anacostia River to the Arboretum in light of new initiatives to improve the use of the river by the District of Columbia. By doing so, planning will create better and more accessible trails and pathways for pedestrians in the eastern sector of the facility, as recommended in the existing Arboretum Master Plan of 2000. A monetary gift from the Chinese government, intended to demonstrate the history and culture of Chinese gardening, has provided the National Arboretum an opportunity for additional development within the eastern sector of the Arboretum in an area that extends from Holly Spring Road to the central area of the Arboretum, and from the Anacostia River waterfront to the northern boundary at New York Avenue.

# Alternatives considered in the EA review

The EA examines three alternatives; the proposed action and a variant of the newly proposed Classical Chinese Garden. The EA also examines the no action alternative.

The proposed action is identified as specified above.

The second alternative is a version of the proposed action that provides a larger extent of grading modification, soil movement and replacement, and greater potential for soil erosion at the Chinese Garden complex area. This alternative also does not require the realignment of Holly Spring Road and thus would not provide new drainage structures for low impact development associated with the road relocation and pedestrian pavement areas near the road.

The no action alternative is described as the conditions under which none of the proposed construction, rehabilitation, or accessibility projects would be implemented. Implementation of projects defined in the 2000 Master Plan would continue, but actions to develop a Chinese Garden, improve access to and from the Anacostia River, and resolve traffic circulation and pedestrian vehicular conflicts within the eastern sector of the Arboretum would not occur.

# Potential impacts

NCPC staff has found few potential environmental impacts with the proposed action. Those that exist are minimal or minor and are addressed by mitigation through design modifications, best management practices, and revised design that the applicant has incorporated into its submission of the master plan modification. Affects to cultural components of the environment regarding potential plans may impact one small site area and are being addressed by a National Historic Preservation Act, Section 106 requirements, which would be completed by the Arboretum in the further development of the project planning provided to NCPC and the District of Columbia State Historic Preservation Office. The proposed master plan modification does impart minor disturbance to the floodplain of the Anacostia River but does not significantly or adversely impact the Anacostia River floodplain, as reviewed by the NCPC staff in accordance with federal Executive Order (EO) 11988, "Floodplain Management".

Applying the standards, factors, and analysis here, the Executive Director must make the assessment of whether approval of the submitted master plan modification will "significantly" affect the human environment based on the EA and the mitigation set forth in that document and this finding. As to the factor of the context, this is a site-specific action, and the Executive Director looks at the effects on the locale. In regard to intensity, with the mitigation specified in the EA, the effects on the human environment with regard to the master plan modification and site development will be sufficiently reduced by the measures noted below that the effects will not be significant. Additionally, because only one National Register resource exists in the project area, the NHPA Section 106 Memorandum of Agreement, if required, would be sufficient to address any potential affects.

Staff has reviewed the action for extraordinary circumstances that may contribute, in any form, to establishing environmentally significant effects to the proposal. These conditions include whether the action creates a precedent for further action with significant effects; and whether the action is related to other actions which may have individually insignificant, but cumulatively significant impacts.

Staff finds none of those circumstances exists. Within the Arboretum, a number of actions proposed by the 2000 Master Plan have been completed. Of the actions—some under final construction, these include: construction of a main facility entrance road, development of a tram stop at the future visitor center, planting of a perennial garden, and an Origin of Cultivated Plants Garden, construction of new roads near the visitor center, creation of a flowering tree/capitol columns walk, the renovation of the Central Meadow overlook area, and the construction of new modern greenhouse facilities. These actions have or will be occurring in the western sector of the Arboretum near the current visitor center and will not affect the proposed action in the eastern sector of the Arboretum due to their significant terrain separation, differentiated watershed drainage area of potential effects, and temporal separation as completed projects.

Potential effects identified by the EA analysis included the following issues of hydrology, topography, vegetation, noise, transportation, and possible cultural effects. None are significant impacts. Other issues of wildlife, air quality, viewsheds, and environmental justice were not found to be relevant impact concerns of the proposed action given that the modification involves only the eastern internal section of the land area of the Arboretum. Resource areas evaluated in detail include:

# **Hydrology**

The proposed action will have minimal impact on the hydrology within the area of proposed action. Much of the hydrologic impact of the proposed action will exhibit no change to the major water drainage patterns of the Arboretum. The proposed five pond areas of the Chinese Garden are independent and isolated water features that will be connected only to new drainage systems within the Chinese Garden complex by hydraulic pipes, with some featuring recirculation functions. The ponds themselves will serve a variety of purposes including stormwater management and new habitats for wildlife and aquatic species at the Chinese Garden complex.

#### Wetlands

The proposed action will have a minimal or no impact on the 743 square foot wetland area that runs along the banks of the Anacostia River at the base of the Asian Collection on the eastern boundary of the Arboretum. This wetland resides outside the limits of potential work in the establishment of a new entrance at the existing access point on the eastern boundary near the Asian Collection ravine path.

#### Floodplain

The only construction that would occur within the floodplain would be the development of the pedestrian trail along the Anacostia River and the tram stop at the trail that features pervious pavement materials. To provide access at the river shore, the trail and stop would necessarily be located within the floodplain. The floodplain extends three hundred feet from the river's edge toward the hills within the Arboretum. The proposed location would not increase the risk of flooding and/or flood related damage within the floodplain area. The National Arboretum intends to establish an Executive Order 11988 floodplain finding as required by the directive once preliminary design details of the features at the tram stop and pathways, including a new metal picket perimeter fence, are completed. NCPC staff review in compliance with the Executive Order is presented below.

# Floodplain Finding

The proposed master plan update and its implementation would minimally affect the 100-year floodplain of the Anacostia River adjacent to the Arboretum at the river's western shoreline. Federal Executive Order (EO) 11988, "Floodplain Management," May 24, 1977, seeks to avoid the long and short-term adverse impacts associated with the occupancy and modification of floodplains, and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative. EO 11988 applies to federally supported projects and directs agencies to consider alternatives to siting activities in a floodplain.

The Executive Order addresses development in the 100-year floodplain as well as critical actions in the 500-year floodplain. A critical action is defined by the Water Resources Council Floodplain Management Guidelines, developed to implement EO 11988, as any activity for which even a slight chance of flooding is too great. For example, if an action would create an added dimension to the flood (such as facilities producing or storing volatile or toxic materials) or if the occupants of a building located in the floodplain (hospitals, schools) were not sufficiently mobile to evacuate, the planned project would be regarded as a critical one. The loss of irreplaceable records or emergency services involved in a planned action would also be considered criteria for critical actions. NCPC has determined the proposed tram stop and pedestrian pathway modifications of the revised master plan are not critical actions and do not add any significant effect to the flow dynamics of a flood, nor does the proposed construction occur in the floodway of the Anacostia River.

Alternative sites not involving the floodplain were evaluated by the Arboretum and reviewed by the NCPC staff to further determine the effects of potential activity locations. Much of the existing property at the area of the Arboretum being considered for the path and the tram stop is designated as leisure interest/open space areas and are the only areas feasibly adjacent to the Anacostia Waterfront trail, a project of the District's Anacostia Waterfront Commission in cooperation with the National Park Service. Information presented in the EA indicates there are no practicable sites outside the floodplain area that are feasible for the proposed Arboretum facilities and that still will meet the planned objective of connecting to the Anacostia Waterfront trail, or other planned pedestrian paths proposed by the National Park Service, beyond the Arboretum's boundary and near the river's edge. Other considered areas involved steep slopes or densely forested tracts of land that are not feasible for trail development.

Review by NCPC staff of all pertinent information provided by the Arboretum indicates the proposed pathway improvements will not significantly or adversely affect the floodplain. No substantial displacement of floodplain water storage area will occur because all project elements will be subject to inundation during flooding and contain no volume extent that would displace floodwaters. No significant surface grade or impervious areas are introduced. Site grading is minimized at the area of the planned improvements to have only a minor effect to vegetation. Consequently, the flooding characteristics of the river at this location are not significantly or appreciably altered. Recreational amenities (benches) included in the pedestrian pathways will be designed to withstand flooding impacts.

# Water Quality

The proposed action has the potential to minimally modify water quality in the Hickey Run Tributary due to minor increases in levels of impervious surfaces and related runoff from the new roof structures and road surfaces of the relocated Holly Spring Road. The proposed action provides mitigation of this minor effect to include the use of Low Impact Development practices that would treat and modify the runoff prior to its reaching the Anacostia River. Such features will include the use of vegetation and grass filter strips, vegetated buffers, additional trees, and grass swales. NCPC staff finds these provisions as specified on and within the submitted design are appropriate and adequate to address the effect.

# Chesapeake Bay Resource Protection Area (Critical Area)

The proposed action will have no significant impact on the critical area requirements of the Anacostia River. The development of the trail near the Anacostia River is a permissible type of development within the guidelines of the Chesapeake Bay Preservation Act. Specifically, the following provisions apply and are adhered to by the submitted proposal:

- No forest areas will be cleared.
- No steep slopes will be affected, unless the disturbance is necessary to maintain or improve the stability of the slopes.
- No habitat protection areas will be affected.
- Area of disturbance does not exceed 500 square feet
- No non-tidal wetlands or habitat areas will be affected by this proposed activity.
- The increase in impervious area is within the allowable limits for this Critical Area Overlay Zone.

#### **Topography**

The proposed action is affecting existing topographic conditions within the area of work at the east side of the Arboretum, but is not significant. Site grading work would be need to undertake the construction of the ponds, relocated roadways, buildings and trails to level out the topography of the areas. These areas, however, are selectively developed or altered within defined limits to each area. The proposed development elements of the master plan modification will have specific constraints that must be taken into account in that area. Specific measures to mitigate minimal impacts associated with these areas and committed to in the master plan modification include:

# Chinese Garden Complex

During the cut and fill and grading operations to prepare the Garden Complex site for the construction, approximately 37,000 cubic yards of soil will be cut from the high part of the construction area, and would be transported to fill approximately 36,000 cubic yards of land near Holly Spring Road. Submitted plans specify techniques that include: the creation of temporary diversion channels, building of retaining walls where the garden meets Hickey Hill, soil binding applications, and geotextile stabilization of layered earth construction. Sedimentation control plans and a stormwater management plan will be prepared by the Arboretum and submitted to the District of Columbia Department of Consumer and Regulatory Affairs (DCRA) for this work as required by the National Pollutant Discharge Elimination System (NPDES) purposes in

accordance with the Clean Water Act. NCPC future project reviews of the specifically implemented plans will assure compliance and incorporation of these mitigation features, and current master plan modification identifies the use and presence of these elements in the proposal drawings. NCPC staff finds these measures as noted above appropriate and adequate. Required future NCPC review and approval of project plans will insure their implementation.

#### Asian Collection Rehabilitation

The effects on topographic conditions within the Asian Collection area of the Arboretum will occur during the construction of the realignment of Hickey Hill Road near the Asian Collection exhibit. In the submitted plans, approximately 235 cubic yards of soil will be cut and used to fill approximately 440 cubic yards of land to create a level terrain for the realignment of the road. Mitigation actions will follow best management practices to control erosion during this construction through developed erosion control plans established in accordance with a stormwater management plan that will be prepared by the Arboretum and submitted to the District of Columbia Department of Consumer and Regulatory Affairs (DCRA) for National Pollutant Discharge Elimination System (NPDES) purposes in accordance with the Clean Water Act. The erosion and sedimentation control plan will include measures to prevent erosion of cleared areas and the transport of soil and sediment. Techniques that will be implemented include: diversion channels, soil binding applications, geotextile fabric stabilization, and slope drains. NCPC future project reviews of the specifically implemented plans would assure compliance and incorporation of these features, and the submitted master plan modification identifies the use and presence of these elements in the modification proposal. NCPC staff finds these measures as noted above appropriate and adequate. Required future NCPC review and approval of project plans will insure their implementation.

#### Anacostia Waterfront Access Path

Slight impacts on existing topographic conditions will result from the construction of the waterfront access path. During construction, minor grading may need to be completed to create level terrain for the development of a tram stop. Project measures will employ best management practices that would be implemented in construction of the area and will include temporary revetment of soils, soil binding applications, and geotextile stabilization of earth layers. Sedimentation control plans and a stormwater management plan will be prepared by the Arboretum and submitted to the District of Columbia Department of Consumer and Regulatory Affairs (DCRA) for National Pollutant Discharge Elimination System (NPDES) purposes in accordance with the Clean Water Act. The master plan modification identifies the use and presence of these elements in the submission. NCPC future project reviews of the specifically implemented plans will assure compliance and incorporation of these features. NCPC staff finds these measures as noted above appropriate and adequate. Required future NCPC review and approval of project plans will insure the mitigation implementation as a provision of the approval process.

## Vegetation

Construction activities associated with the development of the Chinese Garden complex, the Anacostia waterfront access path, and the Asian Collection rehabilitation will require removal or alteration of existing vegetation within the areas of proposed action. None of this activity is

found to be significant as mitigated by the master plan modifications covering each area noted below.

# Chinese Garden Complex

Due to the proposed construction of the Garden Complex in the existing meadow, the Chinese Garden area will result in changes to vegetation at the Arboretum. Proposed modifications include removal of two mature stands of white pines, select other trees, and native grasses as part of construction. Arboretum officials state (2006) that many of the trees denoted for removal (the white pines) are aging and becoming weak wooded. These trees are closely planted together, in poor condition, prone to blow downs, and would need to be removed by the Arboretum in the future within a period of five to ten years.

The Garden Complex impact on vegetation is found by NCPC staff to be minimal in effect due to master modification design provision that stipulates replacement of existing trees with new ones, and the installation of new trees, shrubs and groundcovers in the new Chinese Garden complex design. This effect is not significant. It is likely, however, that replacement will not be one-for-one regarding species, but that new species will be planted as appropriate to the design of the new garden complex. The new vegetation of the master plan modification will help absorb some of the stormwater runoff created by the removal of current trees and groundcover and any additional impervious surfaces created within the area. The submitted plans specify and commit to tree planting replacement at the east side of the Garden complex. NCPC future project reviews of the specifically implemented plans would assure compliance and incorporation of these features. NCPC staff finds these measures as noted above appropriate and adequate. Required future NCPC review and approval of project plans will insure their implementation.

# Anacostia Waterfront Access Path

Construction of the Anacostia waterfront access path will create a minor impact on vegetation along areas of the Arboretum near the Anacostia River and is not significant due to the limited number of trees involved. During construction of the access path, only a select number of trees may have to be removed at the base slope area of hills. To prevent excessive amounts of erosion, development of a temporary revetment will minimize erosion and prevent advanced erosion problems near the river. Since the mid 1990's, the National Arboretum has modified their vegetation mowing policy to promote the regrowth of a natural buffer along Hickey Run and bottom land areas. This effort will be implemented and maintained in the area of the access path. NCPC staff finds these provisions and the use of these mitigation measures adequate to address the effects.

#### Asian Collection Rehabilitation

The rehabilitation of the Asian Collection will have no significant impacts on vegetation within the area of proposed action. In order to clear a path for the realignment of Hickey Hill Road, a small number of white oaks and Virginia pine trees will have to be removed. In removing these trees, the master plan modification incorporates and identifies sediment and erosion control measures to minimize the effect on the surrounding environment.

The development of an elevated ADA-accessible trail near the Dogwood Collection of the Asian Collection area will have a minor impact on the vegetation and is not significant. To limit the minor effect that the boardwalk would have on existing plants in the metasequoia grove, designers have provided in the master plan modification an elevated path that will reduce the walkway disturbance area and thus significantly minimize the vegetation disturbance. In building the boardwalk, the activity will incorporate the erosion control measures developed under the requirements of the District of Columbia erosion and sedimentation control plan requirements and include geotextile stabilization of small construction related soil areas. These areas are identified in the master plan modification. NCPC future project reviews of the specifically implemented plans will assure compliance and incorporation of these features. NCPC staff finds these measures as noted above appropriate and adequate. Required future NCPC review and approval of project plans will insure their implementation.

# **Noise**

Temporary increases in ambient noise levels within the Arboretum will occur during construction activities associated with the proposed action, but are found by the NCPC to be not significant given that they are temporary. Arboretum construction specifications during the modification's phased implementation will impose the following restrictions on construction activities:

- 1. Strict adherence to all applicable local noise ordinances.
- 2. No construction activity to commence prior to 6:00 am or terminate later than 6:00 pm.
- 3. All equipment is to be well maintained and in proper working order.
- 4. Internal combustion engines or heavy equipment, generators, compressors, cranes and other equipment are to be fitted with mufflers that maintain the noise levels to applicable standards.
- 5. The project area is to be posted to warn of the possible dangers from noise. Pedestrians will be encouraged to remain at a safe distance from the site.
- 6. Noisy equipment is to be kept as far away as possible from nearby receptors, and the equipment would not idle un-necessarily.
- 7. Stationary noise generating equipment is to be enclosed.

NCPC future project reviews of the specifically implemented plans would assure compliance and incorporation of these features. NCPC staff finds these measures as noted above appropriate and adequate. Required future NCPC review and approval of project plans will insure their implementation.

Other sources of noise pollution will minimally increase due to the proposed action. No significant increase in visitor population to the Arboretum is anticipated beyond that noted within the existing 2000 master plan (approximately 750,000 people per year). That visitation was found to be accommodated by the 2000 plan in the creation of a new entrance road to the facility from Bladensburg Road and the removal of vehicle traffic within the Arboretum by the implemented tram system of the master plan. These actions were analyzed by the October 2000 EA completed by the Arboretum and found to be not significant.

In the December 2006 submitted master plan modification, only the Chinese Garden Complex is a completely new structural area. While this noise pollution source will generate minor amounts of noise, its presence will have only a minimal effect on the auditory environment of the Arboretum. Potential sources of noise will include the increased volume of tram and pedestrian traffic that

will be generated by the addition of new tram routes at the Garden Complex, but is not significant due to the increased distance from the Arboretum property boundary and isolating barrier of the intervening hills of the interior site location. The installation of permanent, noise-producing mechanical equipment (i.e., air conditioning units, ventilation units, and generators) associated with only four new buildings is anticipated to increase the background ambient noise level, but is minimal and not significant given that all new equipment will meet U.S. EPA, Department of Energy, and Occupational and Health Administration noise standards for noise production by those types of equipment.

### **Transportation and Pedestrian Circulation**

The Arboretum is committed to the construction of the tram system in conjunction with the construction of the Chinese Garden and plans to minimally increase the number of trams to accommodate visitors. The proposed action calls for the creation of new tram stops along Holly Spring Road at the Chinese Garden complex, and at the Anacostia waterfront access path. The development of these few stops and the additional building infrastructure surrounding them, (i.e., the Chinese Garden on Holly Spring Road) will require the realignment of Holly Spring Road and the creation of new landscaped features at the Anacostia waterfront access path.

The construction of these roads will have no significant short-term impacts on traffic circulation. During this time, certain road access may have to be limited to service only; moreover, current circulation patterns may have to be temporarily diverted. In the long term, construction of the Chinese Garden complex will require the removal of underutilized portions of Meadow Road and Hickey Hill Road in what is now the existing meadow. The traffic currently served by these roads can be accommodated by Hickey Hill Road after construction. Moreover, once the proposed actions are completed and the few additional tram routes are added, the net impact on transportation will be an improved circulation network within the Arboretum.

Pedestrian access to Arboretum exhibits and collections within the area of proposed action will be enhanced with the development of new trails to access the Anacostia River and the Chinese Garden complex. The construction of each of these paths will add new pedestrian routes where none currently exist. The greatest potential for change will occur with the development of the Outer Loop trail. This trail will create a permanent ADA accessible trail that will provide visitors with access to each of the collections in the eastern half of the Arboretum, including the Holly / Magnolia Collection, the Chinese Garden, the Asian Collection as well as the Dogwood and Gotelli Collections. Many of these elements are currently not ADA compliant. Other pedestrian circulation improvements will be the development of the waterfront access path and the trail along the Anacostia River. While the latter is currently an unmarked trail, the path will be improved with pervious paving, signage and upgraded Arboretum entrances. This trail will provide more visitors with access to the river and will provide a linkage to other possible river activities in cooperation with the District's Anacostia Waterfront Initiative Plan.

Temporary impacts resulting from construction activities at the Arboretum would result from construction vehicles accessing the site, but are not significant. Access to the site by construction vehicles would be consistent with District regulations for truck and construction movement and access. In order to minimize temporary and minor impacts of construction activities associated with the proposed Chinese Garden Complex, construction activities would be conducted in accordance with the District of Columbia controls listed in the Manual on Uniform Traffic

Control Devices and any other applicable District of Columbia construction control requirements for traffic. NCPC staff finds this provision and the use of this mitigation measure as specified in the submitted modification plan appropriate and adequate to address the effect. Required future NCPC review and approval of project plans will insure their implementation.

# **Cultural Resources-Historic features**

The National Historic Preservation Act, Section 106 consultation, will be addressed during specific project design implementation for each element of the master plan modification. Initial discussion and review of the master plan modifications occurred with the District of Columbia Historic Preservation Office in July 2006 (see attached letter).

Within the area of the master plan modification and project development, only one structure—the Chinese gazebo (within the Asian Collection)—is cited in the National Register of Historic Properties as a contributing resource towards the historic importance of the Arboretum. This structure is not affected by any construction within the proposed area. Based on this outcome, NCPC staff finds there is no significant effect on historic resources from the proposed action.

Coordination and Section 106 consultation with the District of Columbia State Historic Preservation Office will continue with development of the preliminary design and the establishment of a determination of affect by the National Arboretum as required by Section 106 of the National Historic Preservation Act.

# Cultural Resources-Archeological features

The EA acknowledges that there may be archeological resources effects, and that participation in consultation process under the National Historic Preservation Act is ongoing. However, based on the findings of the EA development, NCPC staff has determined the potential impact not significant to archeological features because of the proposed action's avoidance of the potential resources within the master plan modification area, and would be mitigated by the Arboretum's further definition of the archeological site area and consultation with the District of Columbia State Historic Preservation Officer during specific project area design implementation.

The area of proposed action involves four sites listed as potential archeological resources, per a coordination letter received from District of Columbia State Historic Preservation Officer (DC-SHPO) dated July 24, 2006. The SHPO recommended avoidance of these areas. Avoidance is a feasible action in regard to the proposed plans, since none of the identified archeological sites are within the limits of the master plan modification. Still, even with the implemented measure of avoidance, the location of the identified archeological site 51NE12 on the eastern edge of Arboretum property is not clearly defined in the map provided by the DC-SHPO's office. A careful definition of the area in preliminary design efforts will further determine the exact location and extent of the site. Avoidance measures such as modification of project plans or relocation of the project design features will be taken if the site was deemed to be in conflict with the proposed construction of the access path along the Anacostia River.

In the event that archaeological resources are uncovered during ground-disturbing activities, construction by the National Arboretum would stop while appropriate archaeological studies are completed in accordance with Section 106 of the National Historic Preservation Act. NCPC staff

finds the provision and the use of this mitigation measure as specified is appropriate and adequate to address the effect, should it occur. The National Historic Preservation Act, Section 106 consultation specific requirements will be addressed during individual project design implementation.

#### GOVERNMENT OF THE DISTRICT OF COLUMBIA HISTORIC PRESERVATION OFFICE OFFICE OF PLANNING

July 24, 2006

Ms. Lisa Bynum, Realty Specialist Real Property Section USDA 10300 Baltimore Ave Beltsville, MD 20705-22350

Dear Ms. Bymum:

We have received your letter of June 22, regarding the Master Plan revisions to address a new Chinese Garden, Anacostia Waterfront Access and a re-design of the Asian Collections.

We have reviewed the plans you sent and it appears that the primary concern would be impact to archaeological resources. I have enclosed a map (Figure 3) from the Archaeological Resources Study completed in 1993 for the Arboretum which shows the location of archaeological resources that were identified through map research. A field survey conducted for this study determined that a number of those sites have no archaeological potential. I have enclosed Table #1 which shows this assessment site by site. On Figure 3, I have circled those sites that were determined to have archaeological potential (18, 20, 23 and 29) which appear to be located in the project area. These are the loci that you need to be aware of as you develop your plans for the Chinese Garden and re-design of the Asian Collections. Avoidance of any of these archaeologically sensitive areas is the suggested approach, however, if this can't be done then we would need to discuss the next step. If there is going to be impact to any of the other areas in which sites with intact deposits have been identified, then again, we would have to develop a plan to identify the significance of the resource.

There is also an already identified site on the eastern edge of the property, 51NE12. As plans develop for the Anacostia Waterfront, any impact to this potential site would need to be addressed.

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July 24, 2006

We look forward to hearing from you as you continue developing these plans. If you have any questions, please contact Nancy Kassner of my staff at 442-8836, or nancy.kassner@dc.gov.

Sincerely,

David Maloney

Deputy State Historic Preservation Officer



Current topographic map of the Mational Arboretum (MCPC 1981) marked with archaeological site locations.

22863

# POTENTIAL HISTORIC ARCHAEOLOGICAL SITES UNITED STATES NATIONAL ARBORETUM

	I CANTON!	HISTORIC USE	
-01			ARCHAEOLOGICAL POTENTIAL
	1	Blacksmith shop, residence	
30	<b>2</b>	School 2, 100 Lunce	Intact deposits possible
	3	Farmstead	Intact deposits possible
10000		Unknown	Intact deposits unlikely
788	5	Puneral monument factory,	Intact deposits unlikely
		residence	
	<b>6</b>	Arboretum work station	Intact deposits possible
	7	Unkpown	Intact deposits unlikely
	er en		Intact deposits possible
	10	Residence?	Intact deposits possible
	11	Residence?	Intact deposits unlikely Destroyed
	12	Residence	
	<b></b>	Springhouse?	Intact deposits possible
***	14	Residence	Intact deposits possible
	15	Parmstead	Intact deposits possible
Ø	16	Farmstead	Intact deposits possible
3	13	Parmstead	Intact deposits possible
1		Farmstead	Intact deposits unlikely
	19	Farmstead	Intact deposits possible
		Parmstead	Intact deposits unlikely
2	21	Parmstead	Intact deposits possible Disturbed
		Arboretum work station	
		Parmstead	Intact deposits unlikely Intact deposits possible
		Arboretum work station	Intact deposits unlikely
		Unknown	Intact deposits unlikely
		Farmstead?	Intact deposits unlikely
		Farmstead	Intact deposits unlikely
		Unknown	Intact deposits possible
		Civilian Conservation	
1		Corps camp	Intact deposits possible
*			Intact deposits possible
	<b>32</b>	Pottery factory, residence?	Intact deposits possible
	***	Residence	Intact deposits possible
*	NOTES:		FASSING TO SERVICE TO

- 1: Location numbers referenced to Figure 3
  2: There is a Memorandum of Agreement for the preservation and recordation of this site.

  3: Gyrisco and Geidel 1990

  4: Cheek et al 1987